

DALI PS

Datasheet

DALI Bus Power Supply Unit



DALI-line power supply

Art. Nr. 24033444

DALI PS Bus Power Supply

Overview

- DALI bus power supply unit
- guaranteed Supply Current 220mA
- maximum Supply Current 250mA
- suitable to power an entire DALI-line with 64 standard DALI ballasts
- suitable for dinrail mounting
- power supply range 120Vac ... 240Vac for worldwide use
- surge immunity up to 400V
- load indicator
- integrated test button for function check
- system status queries (DALI current, bus load, runtime etc.) with DALI-Cockpit Software



Specification, Characteristics

type	DALI PS
article number	24033444
input: L, N	
input type	mains power supply
marking input terminals	L, N
input voltage range	120Vac ... 240Vac
max. input supply current	40mA (@120Vac), 20mA (@240Vac)
input supply frequency	50Hz / 60Hz
power consumption max.	5,3W
startup time	250ms
output: DA+, DA-	
output type	DALI Supply
marking output terminals	DA+, DA-
output voltage range	12Vdc ... 20,5Vdc
DALI supply current	250mA
guaranteed DALI supply current	220mA
max. DALI supply current	250mA
open circuit proof	yes
short circuit proof	yes
shut down on short circuit	yes
insulation data:	
impulse voltage category	II
pollution degree	2
rated insulation voltage	250V
rated impulse withstanding voltage	4kV
insulation DALI / mains	reinforced isolation

Insulation test voltage DALI / mains	3000V a.c.
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enviromental conditions:

storing and transportation temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +55°C
rel. humidity, none condensing	15% ... 90%

general data:

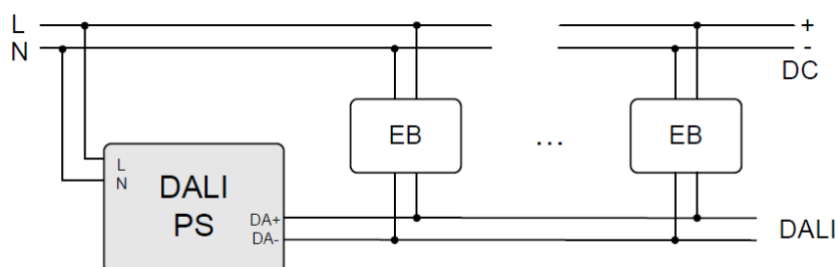
dimensions (l x w x h)	98mm x 17,5mm x 56mm
mounting	dinrail
rated maximum temperature tc	75°C
expected life time @tc	50.000 h
protection class	II in intended use
protection degree housing	IP40
protection degree terminals	IP20

terminals:

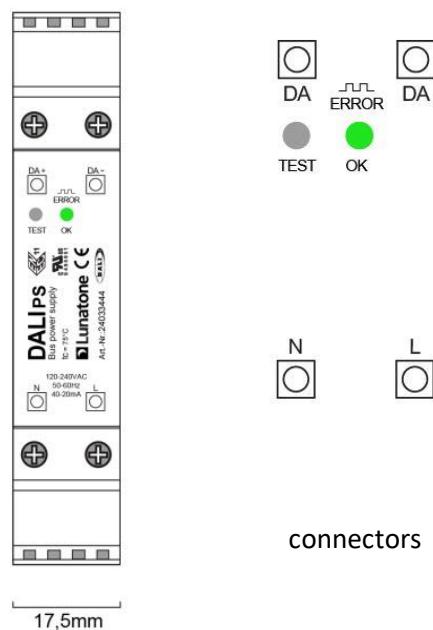
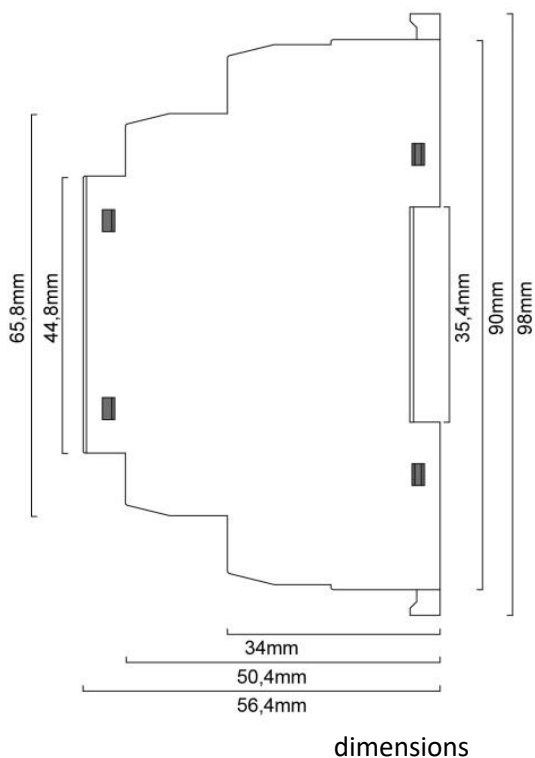
connection type	screw connector
wire size solid core	0,5 ... 2,5 mm ² (AWG 20 ... AWG 14)
wire size fine wired	0,5 ... 2,5 mm ² (AWG 20 ...AWG 14)
wire size using wire end ferrule	0,25 ... 1,5 mm ²
stripping length	7 mm / 0,27 inch
locking torque	0,5 Nm
release of wire	open screw

standards:

DALI	EN 62386-101:2014
EMC	EN 61547 EN50015 / IEC CISPR15
safety	EN 61347-2-11 EN 61347-1
markings	DALI-2, CE, ENEC, cURus
UL file number	E495951



wiring diagram



Installation

- The DALI PS is intended for dinrail mounting
- Ensure protection against electric shock by an appropriate enclosure
- Wiring as fixed installation in a dry and clean environment
- Installation only by qualified person when no voltage is applied
- Attend regulations regarding electrical installations of national authorities
- connect power supply terminals L and N to mains voltage
- the polarity of the output voltage is marked on the housing (DA+, DA-)
- The DALI-line may be installed within the same cable or as single conductors within the same tube as mains supply
- The DALI-line must not be connected to the mains or other extra low voltage systems
- DALI-line wiring with standard low voltage installation material
- Wiring topology of the DALI-line: Line, Tree, Star
- Wiring check by pressing the test button: the green led is flashing and all luminaires connected to the DALI system will be controlled by a test sequence (on, off, dimming). To quit the test mode press the test button again.



HINT: The DALI-signal is not classified as SELV circuit. Therefore the standards for installation in low voltage system apply.




The voltage drop on the DALI-line shall not exceed 2V.

- Don't use standard DC power supplies on the DALI-line, since they do not meet the requirements for DALI communication



HINT: an improper DALI power supply can cause damage on DALI devices!



Device Info

Name	DALI PS	Article Number	24033444	Update...	
Manufacturer	Lunatone	Serial Number	12577	Firmware Ver	2.2
DALI Device Type	N/A	Short Address	A0 ²	Set	

Member Of Groups

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Statistics

Total Runtime:	4 minutes		
Actual On Time:	4 minutes		
Power On cycles:	24	Average Bus Current (1min):	36 mA
Bus Failures:	9	Average Bus Load (1min):	2 %
Test Sequences Executed:	1		

Power up

Sende Befehl Delay: 0.5 s

All (DALI Broadcast) []

RECALL MAX []

System Fail

Sende Befehl Delay: 0.5 s

All (DALI Broadcast) []

RECALL MAX []

Commissioning

- The DALI power supply is ready for use
- Make sure that the guaranteed supply current exceeds the current consumption of all bus devices
- Status-LED:
 - green: normal operation
 - green flashing: overload/short circuit
- The DALI PS is recognized during the addressing procedure and is shown in the DALI Cockpit. System parameters (bus load, DALI current, runtime etc.) can be read out and the behaviour on system events (power on, return of DALI voltage after a system failure) can be configured.

Purchase Order Information

Art.Nr. 24033444: DALI PS, guaranteed DALI
supply current 220mA, din rail

Additional Information and Equipment

DALI-Cockpit – free configuration tool from
Lunatone for DALI systems

<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone DALI products

<http://www.lunatone.com/en>

Lunatone datasheets and manuals

<http://www.lunatone.com/en/downloads-a-z/>

Contact

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Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The function in installations with other devices must be tested
for compatibility in advance.